



# Emerging Renewables Program

Solar Conference

North State Renewable Energy

Chico, CA

March 10, 2005



**BILL BLACKBURN**

Lead, Emerging Renewables Program

California Energy Commission



# Today's Talk

## To Cover Today:

- Emerging Renewables Program Overview
- Update
- Solar Schools
- Performance-Based Incentive Program (PBI)
- Problem Areas
- Future Directions



# Program Overview

## Renewable Energy Program

- New Renewable Facilities Program
  - Accelerate the addition of new renewable capacity to CA's electric generation system
- Existing Renewable Facilities Program
  - Encourage economic viability of existing renewable projects
- *Emerging Renewables Program*



## Emerging Renewables Program

*Goal is to accelerate cost reduction and market acceptance through high volume production of emerging renewable technologies*

- Provides rebates for purchasing & installing distributed generation renewable systems
- Reduces the up-front costs for customers
- Focuses on grid-connected systems designed to meet on-site load



# ERP Eligible Technologies

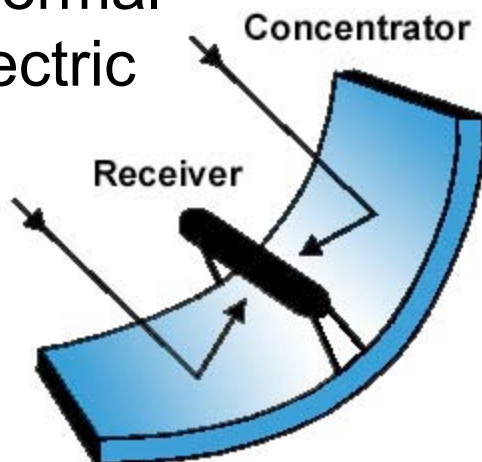


Small  
Wind



Fuel  
Cell

Thermal  
Electric



Solar  
PV





# Emerging Renewables Program

Solar PV, is by far the most common type of application we receive in the ERP





## New Guidebook Highlights

*New Guidebook (4<sup>th</sup> Ed.) was approved January 19, 2005, and can be ordered from our call center or downloaded from web*

### *Highlights:*

- Reservation Request Form (R1) changed
- Extensions no longer be available for new applications after 1/19/05
- Simplified extensions for previous applications
- Seller registration form (R4) has changed



## New Guidebook Highlights

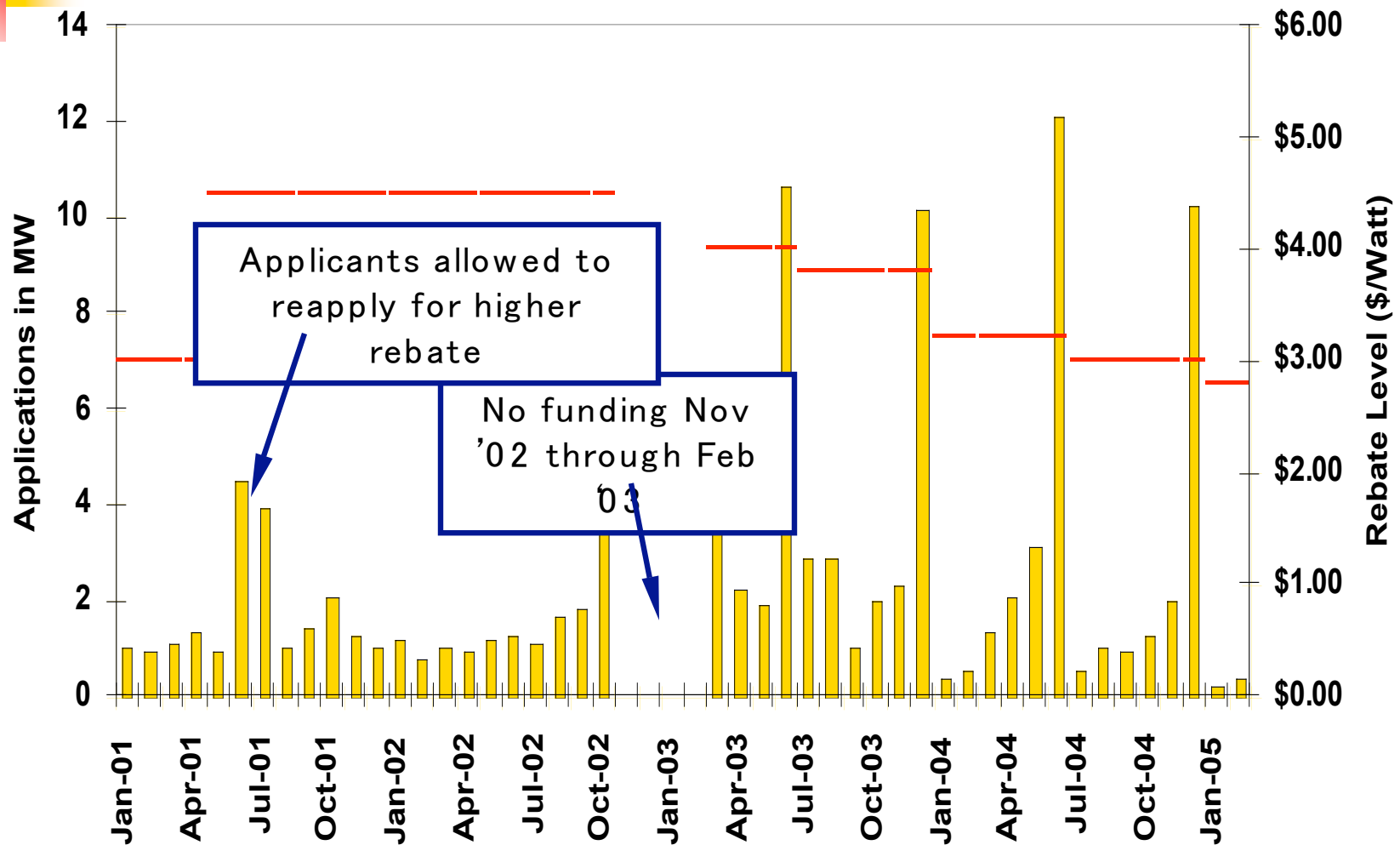
- Sellers still required to re-register by March 31 each year
- An inverter test protocol has been adopted and the inverter ratings must be provided by 4/1/05 with new data
- Applicants can now cancel and reapply during the reservation period if reapplying for a lower rebate level
- The Pilot Performance-Based Incentive (PBI) Program has been added and related new forms





# ERP Rebates Requested

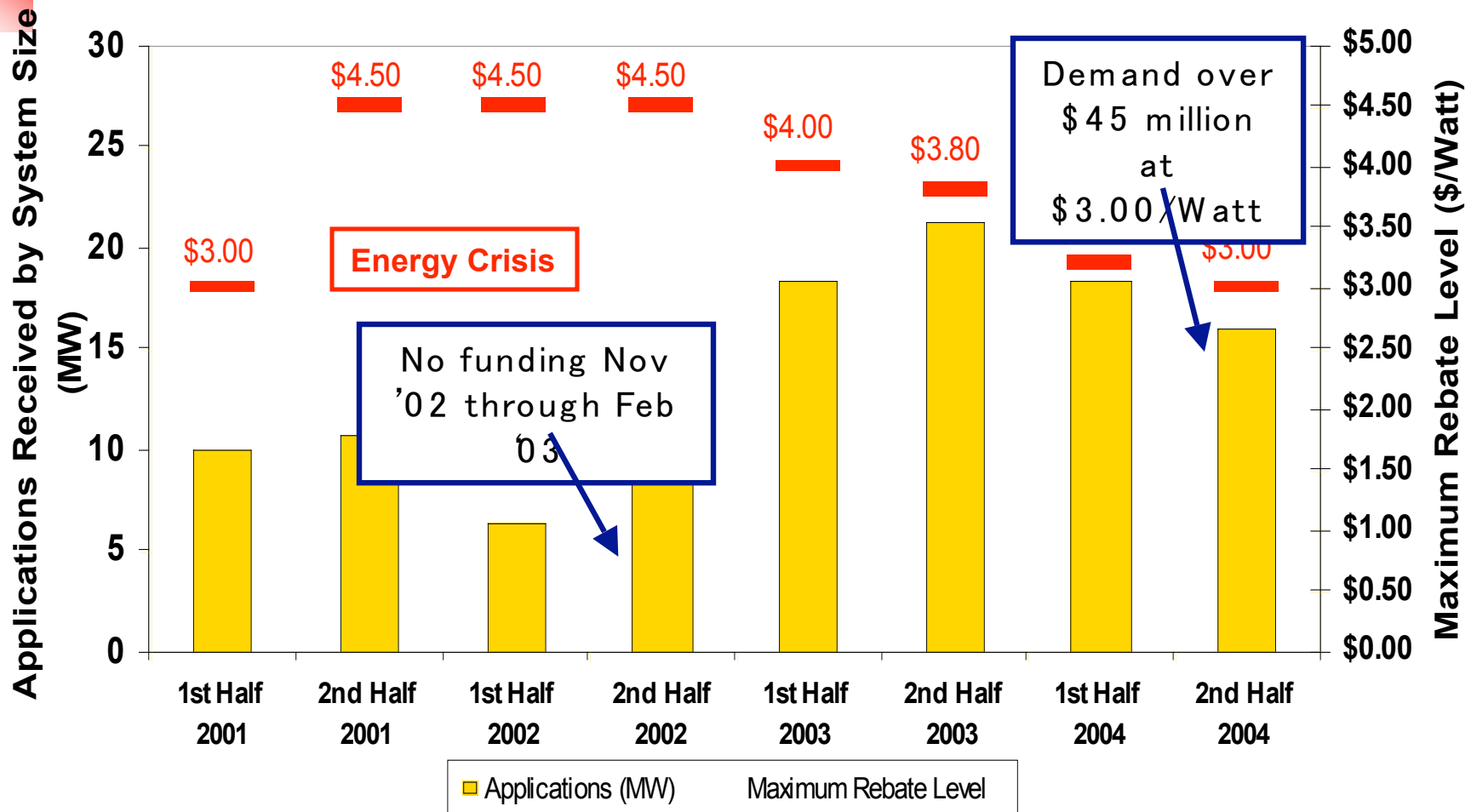
ERP Update





# ERP Rebate Level & Demand

ERP Update

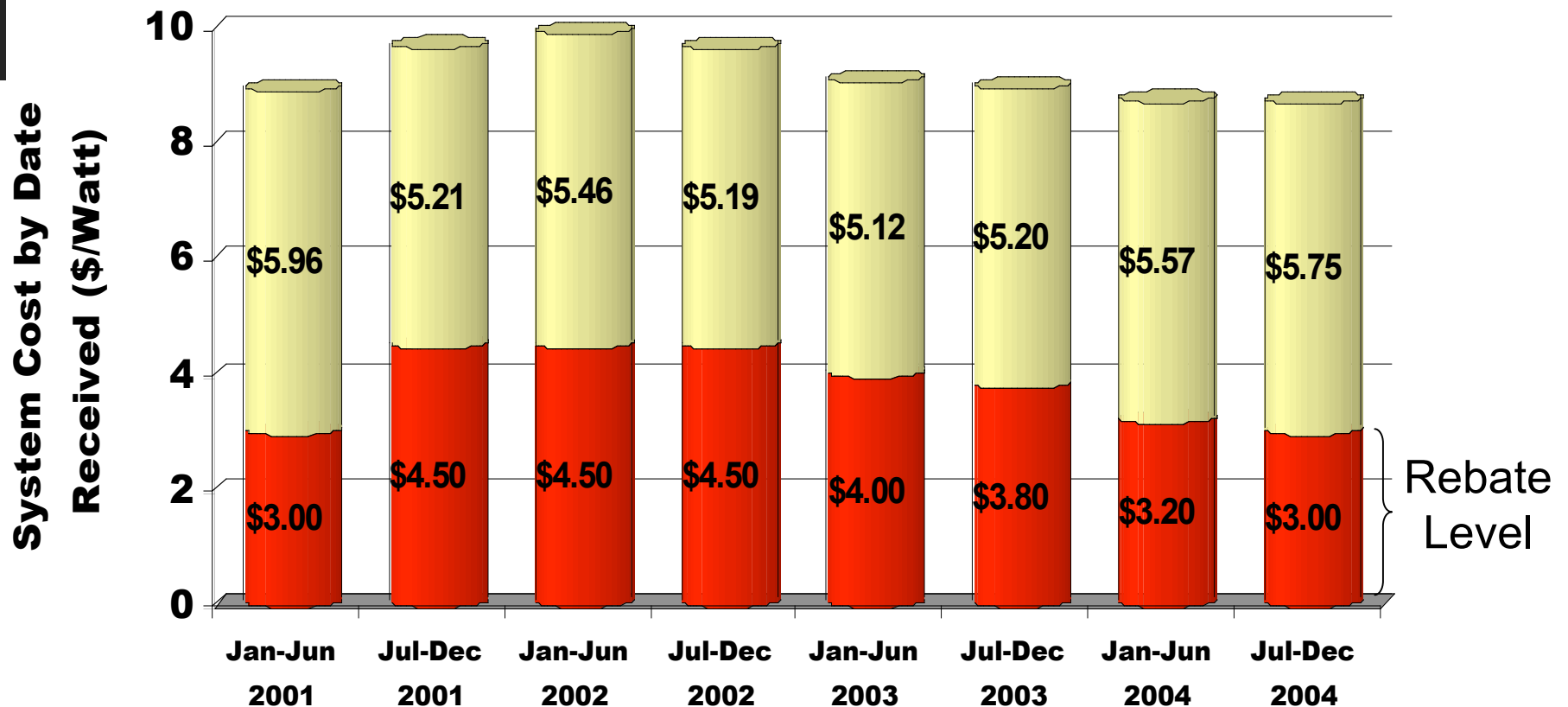


Note: Excludes Solar Schools Program applications.



# Prices, PV Installed Retrofits

ERP Update



Includes all applications based on the date the application was received (1 to 10 kW between \$3 and \$15 per Watt).

Excludes applications for housing developments, affordable housing rebates, and Solar Schools Program.



## Systems Installed - ERP

ERP Update

<i><b>Year (mil.)</b></i>	<i><b>Number</b></i>	<i><b>MW</b></i>	<i><b>Amount</b></i>
1998	41	0.2	\$0.5
1999	197	1.1	\$2.9
2000	235	0.8	\$2.2
2001	1,292	4.3	\$16.9
2002	2,331	8.5	\$36.3
2003	3,021	12.9	\$52.1
<u>2004</u>	<u>4,615</u>	<u>19.2</u>	<u>\$69.4</u>
<b>Grand Total</b>	11,732	47.0	\$180.3



## Systems Installed - ERP

ERP Update

<i><b>Year</b></i>	<i><b>Number</b></i>	<i><b>MW</b></i>	<i><b>Amount (mil.)</b></i>
<b>2005</b> (so far)	648	2.6	\$8.9
<b>New Total</b>	12,381	49.6	\$189.3



# Solar Schools Program

- 2004 SSP launched May 2004
- \$4.5 million in funding, evenly split from AG Alternative Energy Retrofit Account funds and the ERP
- For eligible K-12 public and charter schools within the four utility areas: PG&E, SCE, SDG&E and Bear Valley Electric.
- \$6.40/Watt rebate level (twice ERP rebate at the time)



## Solar Schools Program

- Less than 30 kW; need to provide school board resolution, proof of energy efficiency measures as established by CEC and agreement to set up a curriculum tie-in about solar energy and energy conservation. 60 districts applied; 30 were awarded totaling 703 KW
- Fully subscribed before June 30, 2004
- Most schools located in PG&E territory, six from SCE, two from SDG&E



# Performance-Based Incentive

## **PBI Highlights:**

- Began January 19, 2005
- Program included in new Guidebook (4<sup>th</sup> Edition)
- Solar systems only, any size
- Pilot, three year program
- \$10 million budget
- Quarterly payments of \$.50/kWh produced
- Can not combine with other programs (e.g., ERP or SGIP)





## Problem Areas

- 50% of applications incomplete or with errors
- Service address on utility bill not provided
- Equipment different on R1 form than in supporting documents
- Unclear equipment listed
- Unsigned documents
- No performance meter identified
- Companies without contractor's license charging for labor
  - Have no proof of customer payments to contractor....results in lower self install rebate



# Reservation Process

Turn in:

- Reservation application form (signed R1 form)
- Recent utility bill
- Copy of agreement with installer and purchaser
- Payee data record (STD 204)
  - If not previously paid by CEC



## Future of ERP

- Funding, we have \$71 mil. may run out around late 2005 (plus \$10 mil. for PBI)
- Will return applications that have errors or incomplete
- Moving to “ramp up” whole program
- We would like to hear from you with suggestions on how to best manage a much larger program



## For More Information

*Call Center* **800-555-7794**  
(toll free in CA)

*or e-mail:*

**[renewable@energy.state.ca.us](mailto:renewable@energy.state.ca.us)**

*Websites ...*



[www.energy.ca.gov/renewables](http://www.energy.ca.gov/renewables)

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Emerging Renewables Program

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## Emerging Renewables Program

California Energy Commission

The primary goal of this program is to develop a self-sustaining market for "emerging" renewable energy technologies in distributed generation applications. The **Emerging Renewables Program** (formerly called the "Emerging Renewables Buydown Program") was created to stimulate market demand for renewable energy systems that meet certain eligibility requirements by offering rebates to reduce (buy-down) the initial cost of the system to the customer. [More...](#)

For additional consumer information about rebates, please visit the [Consumer Energy Center](#)

**Guidebooks & Documents**

Local intranet



[www.consumerenergycenter.org/renewable](http://www.consumerenergycenter.org/renewable)

